

## **CERTIFICATION OF ORIGINALITY**

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

---

SITI NORFARIHA MAT HASBI

## ABSTRACT

Accurate pore pressure predictions and well control fundamental is important to be understood and apply correctly during estimating the well formation behavior. Yet, for main reason is to prevent harmful incidents to people who work for the oil and gas industry like Gulf of Mexico . The incident does not just affect human being but also environmentally pollute the sea and killed animals. Safety precautions on well analysis should be taken seriously from beginning of well plan.

There are times when the data needed is not enough and additional information needs to be obtained through evaluations on limited data. Methods use is by generating various graphs to see the trend line in order to evaluate the normal, abnormal or subnormal trend of fluid expansion. The abnormal or subnormal trend line needs to be identified in order to have suitable mud for the drilling process. Therefore, the primer must be reliable.

This data analysis will provide step by step data prediction from well BTY 1 by applying Eaton's method for pore pressure prediction and also using data modeling of volume of shale to see the effect of amount of shale in sediments to the pore pressure. Hope my findings through this research will help better predictions in pore pressure estimation in the future.

The benefit of this research is to help the drilling engineers to predict pore pressure in shale and also helps to see the effect of volume of shale in sediments to the Eaton's exponent.

This method of analysis is recommended in similar province or applied in other similar geological provinces at other part of the world,

## **ACKNOWLEDGEMENT**

First and foremost, I would like to gratitude his grace to Allah SWT for giving the opportunities of life in a peaceful and conductive environment. I also would like to extend my gratitude to both of my parents which continuously give full support on my decisions and pray toward my success in life.

A very special thanks to AP Wan Ismail Wan Yusoff for give his trust toward me. I could not complete the tasks given without his support, assistance and motivation.

Not to forget, many grateful thanks to Dr. Hilfan Khairy and Ms. Raja Rajeshwari as my FYP I and II coordinator and all the external and internal examiners for their kind help to positive comments and share their technical knowledge and work experiences.

Lastly I would like to express my gratitude and appreciation towards my family and beloved friends, Anis Nadiah, Rian Farisha and Nurulhuda for their kind support.

Thank you once again to all of you.